

REMARKS

The Examiner rejected previous claims 30, 42, and 47 as containing the AFP trademark. This problem is avoided by simply using the term page description language in the new dependent claims in place of the AFP trademarked page description language.

The Examiner also rejected previous dependent claim 28 based on an antecedent basis problem. This problem has been avoided in the new dependent claim 50.

The Examiner rejected previous claims 38-42 under 35 U.S.C. §101 as not being directed to a computer-readable medium. This problem is avoided in the new independent computer-readable medium claim 59.

The Examiner rejected previous method claims 25-27 and 29-37 under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention. This problem is avoided in new independent method claim 49 by tying the method to another statutory category - a particular apparatus. Note that claim 49 is tied to a print data processing computer and also to a printing device for creating a printed document from the output format file and from the output document data file.

The Examiner rejected previous claims 25-29, 37-41, and 43-46 under 35 U.S.C. §102 as anticipated by Nakagiri. Claims 30, 32-33, 42, and 47 were rejected under 35 U.S.C. §103 as unpatentable over Nakagiri further in view of Marlin. Claims 34-36 are rejected under 35 U.S.C. §103 as unpatentable over Nakagiri further in view of AFP and line data reference.

New claim 49 clearly distinguishes over Nakagiri first by reciting a method for enhancement of an input document data stream which comprises at least one input format file comprising format definitions. The Examiner cites Nakagiri column 5,

lines 10-13 and column 5, lines 25-30 for this. In column 4, various hardware and software components are mentioned, but no input format file in accordance with claim 49. Column 5, lines 25-31 discloses conversion of control comments to a page description language (PDL). However, there is no disclosure of an input format file.

Claim 49 next distinguishes by reciting an input document data file structured in ranges and sub-ranges and containing variable data. The Examiner cites for this column 7, lines 4-12. Within this portion Nakgiri discloses to split an input document in various batch documents if a book binding finishing option is selected and if the number of sheets of the input document exceeds the number of sheets which can be bound in one path by the binder (see also column 7, lines 13-20). However, in claim 49 the input document data file is structured already in ranges and sub-ranges. This is clearly different than splitting up an input document.

Claim 49 next distinguishes at least by reciting in a control file defining finishing commands and enhancing the data stream with the finishing commands. The Examiner cites column 7, lines 13-15 for this which is not relevant since it only relates to a book binding printing and a finisher performing saddle stitching or two-folding.

Claim 49 next distinguishes at least by reciting in the control file also defining levels that correspond to at least one of the ranges and the sub-ranges of the input document data file. The Examiner cites column 7, lines 15-20 for this. However, this just explains reasons to create “batch documents” from an input document for limiting the number of sheets for the book binding process. There is no disclosure of a respective control file corresponding to ranges of an input file.

Next claim 49 distinguishes at least by reciting using the control file, input format file, and the input document data file, automatically generating and outputting

with the processing computer by a computer program module to a printing device for creating a printed document. For this feature the Examiner cites column 3, line 63 through column 4, line 3 which is not relevant as only disclosing a print control program but no disclosure of using a control file, input format file and the input document data file.

Next, claim 49 distinguishes at least by reciting an output format file that contains the finishing commands in callable groups. For this the Examiner cites column 5, lines 42-48 which talks about conversion of print commands from the graphic engine. There is no disclosure of any finishing commands and there is also no disclosure of callable groups. Nakagiri is talking about just one finishing option, namely book binding. Accordingly, there is neither disclosure nor need of structuring finishing commands in callable groups within a specific output format file assigned to an output document data file.

Next claim 49 distinguishes at least by reciting an output format file that contains the finishing commands in callable groups and an output document data file containing the variable data and group calls associated by at least one of range-by-range and sub-range-by-sub-range. For this the Examiner cites column 6, lines 7-18 which discloses to convert print commands into intermediate code in page units and in parallel to store process settings as a job setting file. From this there is some relationship between the page description file and the job setting file. However, there is no disclosure of group calls. Furthermore, there is no disclosure of group calls which are associated to a range or sub-range. Regarding finishing (book binding), there is only a setting of a parameter value which causes book binding after printing in Nakagiri but there is no disclosure concerning calling finish commands by group calls.

Claim 49 next distinguishes at least by reciting in a control file also associating the finishing commands with the levels and registering which finishing commands are executed in which levels. Nakagiri does not teach this because Nakagiri is not talking about finishing commands. Nakagiri splits the document into batch documents and forwards the batch documents with a single finishing command to the printer. This is not a control file defining levels nor establishment of different finishing commands level-wise.

Finally, claim 49 distinguishes at least by reciting in the control file also associating a first of the finishing commands with one of the ranges and associating a second of the finish commands with one of the sub-ranges. This is nowhere disclosed in Nakagiri.

There is the advantage of the method of claim 49 over Nakagiri that by using the control file, input format file, and input document data file and the group call concept as recited, a user does not need to modify existing input document data streams himself manually. According to claim 49 this is done automatically where there is automatic generation and outputting of an output format file that contains the finishing commands in callable groups and the output document data file containing the variable data and group calls associated by at least one of range-by-range and sub-range-by-sub-range. This advantage is important because with a very large print job data in a production printing environment, such data needs to be processed at a high speed, thus the value of the automatic generation of the type recited above.

Dependent claims 50-58 distinguish at least for the reasons noted with respect to claim 49 and also by reciting additional features not suggested.

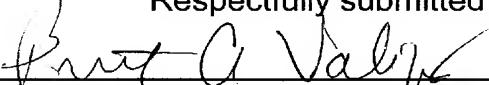
Computer-readable claim 59 and system claim 60 distinguish at least for the reasons noted with respect to claim 49. Also dependent system claims 61-70 distinguish at least for the reasons noted with respect to claim 60.

Independent claim 71 is directed to a method to change or remove original finishing commands in an input document data stream. Instead of enhancing a data stream by new finishing commands in accordance to claim 49, claim 71 provides to exchange or remove original finishing commands. However, most process steps correspond to the process steps of claim 49 and therefore distinguish from Nakagiri for the same reasons.

Allowance of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Respectfully submitted by,

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